

COAL - CLEAN, EFFICIENT, & RELIABLE ENERGY Incorporating

9th APEC Coal Flow Seminar and 10th APEC Clean Fossil Energy Technical Seminar

Dujiangyan City, Sichuan Province, P.R. China

Monday, 18 November to Wednesday, 20 November, 2002

ORGANIZED UNDER THE DIRECTION OF THE APEC EXPERT GROUP ON CLEAN FOSSIL ENERGY (EGCFE) PROJECT STEERING COMMITTEE

Australia: Department of Industry, Tourism and Resources (ITR)

CANADA: Department of Natural Resources (NRCan)

JAPAN: Ministry of Economy, Trade and Industry (METI)

KOREA: Korea Institute of Energy Research (KIER)

PR CHINA: State Power Corporation of China (SPC)

China National Coal Association (CNNA)

USA: Department of Energy (DOE)

SPONSORED BY:

JAPAN: New Energy and Industrial Technology Development Organization (NEDO)

The Japanese Committee for Pacific Coal Flow (JAPAC)

PR CHINA: State Power Corporation (SPC)

USA: Department of Energy (DOE)

Monday, 18 November 2002

8:00 Registration

9:00 JOINT OPENING SEMINAR

Chair: Mr. Scott Smouse

Chair, EGCFE

Senior Mgt. & Technical Advisor for International

Department of Energy

National Energy Technology Laboratory

USA

9:10 OFFICIAL WELCOME BY:

"Welcome from Local People"
TBD
Sichuan Province Representative

9:20 JOINT PLENARY SESSION

OUTLOOK FOR THE COAL AND ELECTRICITY INDUSTRIES IN APEC ECONOMIES

Chair: Mr. Scott Smouse Chair. EGCFE

1 "Outlook for Energy Planning in China"

TBD

SDPC

P.R. China

2 "Outlook for Electricity in China"

Mr. Zhao Xizheng Vice President

State Power Corporation of China

P.R. China

3 "Outlook for Coal in China"

Professor Zhu Deren

Vice Chairman

China National Coal Association

P.R. China

10:35-10:50 Break

4 TBD

Mr. Akira Yasui Deputy Director, Coal Division Natural Resources and Fuel Division Agency for Natural Resources and Energy Ministry of Economy, Trade & Industry

Japan

5 TBD

Mr. Robin Bryant

General Manager, Energy Minerals Branch

Australian Coal Association

Australia

TBD
Mr. Taufik Sastrawinata
Head, Service and Information Division
Energy Technology Laboratory (LSDE)
Agency for the Assessment and Application of Technology (BPPT)
Indonesia

12:05 Lunch

6

13:30 SESSION 1

SEMINAR 1: COAL FLOW COAL DEMAND IN APEC ECONOMIES

Chair: Mr. Robin Bryant General Manager, Energy Minerals Branch Australian Coal Association Australia

SEMINAR 2: CLEAN FOSSIL ENERGY PRESENT SITUATION AND TREND OF CCT RD&D IN APEC ECONOMIES

Chair: TBD

- 1 "China's Coal Exports: Implications for Asia Pacific Markets" Ms. Karen Schneider Chief Economist Energy and Mineral Economics Australian Bureau of Agricultural and Resource Economics (ABARE) Australia
- 2 "Impact of Coal Quality on Coal Supply and Demand in Japan" Mr. Katsuyoshi Ando President Japan Coal Energy Center Japan
- 3 "Coal Demand Outlook in Korea"
 Mr. Chul-Gyu Kim
 Manager
 Fuel Team
 Contract Management Dept.
 Korea South-East Power Co., Ltd.
 Korea
- 4 "Coal Demand in P.R. China: An Increasing Trend"
 Mr. Bai Ran
 Director General
 International Cooperation Department
 China National Coal Association (CNNA)
 P.R. China

"Present Situation and Trend of CCT RD&D in P.R. China"

Professor Zhang Xiaolu

Director General

Department of Science & Technology and Environmental Protection

State Power Corporation of China P.R. China

- 2 "Present Situation and Trend of CCT RD&D in USA"

 Mr. Scott Smouse Chair, EGCFE Senior Mgt. & Tech. Advisor for International Department of Energy National Energy Technology Laboratory USA
- 3 "Present Situation and Trend of CCT RD&D in Japan"
 Mr. Koji Sumigama
 Director
 Energy Environment Technology Dept.
 New Energy and Industrial Technology Development Organization (NEDO)
 Japan
- 4 "Present Situation and Trend of CCT RD&D in Australia" Mr. Harry Zevon Assistant Director Coal Industry Section, ITR Australia

15:35 SESSION 2

SEMINAR 1: COAL FLOW COAL INDUSTRY RESTRUCTURING & GLOBALIZATION

Chair: Mr. Taufik Sastrawinata
Head, Service and Information Division
Energy Technology Laboratory (LSDE)
Agency for the Assessment and Application of
Technology (BPPT)
Indonesia

- 1 "The Australian Coal Industry: Five Years of Change, and the Road Ahead" Mr. Bill Simes Associate Director Barlow Jonker Pty Ltd. Australia
- 2 "Indonesian Coal Development and Related Issues"
 Mr. Suwandi Suyartono
 Director, Mineral and Coal Technique
 Directorate General of Geology and Mineral Resources
 Ministry of Energy and Mineral Resources Indonesia
- 3 "China Coal Industry Restructuring and Globalization"
 Dr. Pan Weier
 (TBD)
 Economic Operation Center
 Energy Research Institute
 State Development Planning Commission
 P.R. China

SEMINAR 2: CLEAN FOSSIL ENERGY ADVANCED PF TECHNOLOGIES

Chair: Mr. Xu Shisen
Senior Engineer
Thermal Power Research Institute
P.R. China

- 1 "Low NO_x Technologies for Utility Boilers"
 Mr. Wang Chunchang Director
 Department of Boiler Combustion
 Thermal Power Research Institute
 State Power Corporation of China P.R. China
- 2 "B&W Supercritical Boiler Technology Update" Mr. Donald L. Wietzke Director, Engineering- Asia Region Babcock & Wilcox Company USA Chief Engineer, Babcock & Wilcox Beijing Co., Ltd.
- 3 "Supercritical Pressure Coal-Fired Boiler" Mr. Hideki Yamanouchi Manager Project Development International Marketing & Sales Operations Babcock-Hitachi K.K. Japan

17:30 Day 1 Adjourns

18:00 Welcome Reception
Hosted by P.R. China

Tuesday, 19 November 2002

8:00 Registration

9:00 Joint Opening Session Chair: Mr. Scott Smouse Chair, EGCFE

Opening Remarks Mr. Nagayasu Taniguchi Executive Director NEDO, Japan

9:05 Keynote Address Non-Power Uses of Coal in China TBD P.R. China

9:30 Break

9:35 SESSION 3

SEMINAR 1: CLEAN FOSSIL ENERGY NEW COAL PREPARATION TECHNOLOGIES

Chair: Professor Zhao Yuemin Vice President University of Mining Technology P.R. China

1 "New Coal Preparation Technology in China"

Ms. Wu Lixin Senior Engineer Directorate of Mineral and Coal Suppliers Clean Coal and Research Center of Coal Industry P.R. China

2 "Coal Preparation for the Chinese

Market"
Mr. Mark Sharpe
Vice President
Project Development
CLI Corporation
USA

3 "Advanced Coal Preparation
Technology for the Jinjia Coal Mine"
Mr. Hajime Endo
General Manager
Engineering Dept.
Japan Coal Energy Center (JCOAL)
Japan

SEMINAR 2: CLEAN FOSSIL ENERGY NEW POWER GENERATION TECHNOLOGIES

Chair: Mr. Akira Yasui
Deputy Director, Coal Division
Natural Resources and Fuel Division
Agency for Natural Resources and Energy
Ministry of Economy, Trade & Industry
Japan

- 1 "Application and Development of Plasma Ignition Technology for Pulverized Coal Boiler in Power Plant" Mr. Wang Ai-Sheng Chief Engineer Yantai Longyuan Power Technology Co. Ltd. P.R. China
- 2 "ChevronTexaco's IGCC Technology"
 Mr. Francis Fong
 Director, Business Organization
 Worldwide Power & Gasification
 ChevronTexaco
 USA
- 3 "Current Situation of A-PFBC
 Technology Development"
 Mr. Hiroyuki Nakata
 Deputy Director
 Wakamatsu Research Institute
 Technology Development Center
 Electric Power Development Company Ltd.
 Japan

11:20 SESSION 4

SEMINAR 1: CLEAN FOSSIL ENERGY COAL CONVERSION TECHNOLOGIES

Chair: Dr. Du Minghua Director Beijing Research Institute of Coal Chemistry P.R. China

SEMINAR 2: CLEAN FOSSIL ENERGY **ENVIRONMENTAL CONTROL TECHNOLOGIES**

Chair: Dr. Sung Chul Shin Senior Advisor Korea Institute of Energy Research Korea

1 "Coal Liquefaction Technologies of Shuang

Ya Shan Project" Mr. Li Kejian Deputy Director Liquefaction Department China Coal Research Institute P.R. China

2 "Application of HTI Coal Conversion

Technologies in China" Dr. Theo Lee President

and

Dr. Peizheng Zhou

Senior Technology Manager Hydrocarbon Technologies Inc.

USA

3 "Application System of Coal Gasification

Technology" Mr. Tetsuo Shikata Executive Chief Engineer Energy Systems Division Babcock-Hitachi K.K. Japan

1 "AOD Ammonia Delivery System for SO 2

Control" Mr. Ligian Wang Chief Engineer

Enelco Environmental Technology Co. Ltd./Environmental Elements Corporation

2 "Flectron Beam Flue Gas Treatment

System" Mr. Shi Jing Ke Manager EBA Division, Project Engineering Dept. 1 **Environmental Engineering Group EBARA** Corporation Japan

3 "The Status of PM 10 and PM 2.5 Emission

of Utility Boilers in China"

Mr. Yao Qiang Professor

Qing Hua University

P.R. China

14:20 SESSION 5

SEMINAR 1: COAL FLOW HARMONIZING COAL USAGE AND THE **ENVIRONMENT**

Chair: Mr. Nguyen Kinh Luan Acting Director of Science and Technology Product Quality Department Ministry of Industry Vietnam

1 "Climate Change: Implications for APEC

Coal Markets" Mr. Yuzuru Nonaka Director Climate Change Corporate Planning & Administration Dept. Electric Power Development Co., Ltd. (EPDC) Japan

2 "Coal and the Environment in Thailand" Mr. Wattanapong Kurovat Policy and Planning Analyst

Energy Policy and Planning Office Ministry of Energy

Thailand

3 "The Need for Fuel Balance in the Electricity

Mix in the Philippines" Ms. Ma Laura Saguin Officer in Charge Conventional Energy Division Department of Energy The Philippines

SEMINAR 2: CLEAN FOSSIL ENERGY **TECHNOLOGIES FOR GHG REDUCTION**

> Chair: Dr. Frank Mourits Manager Climate Change Technologies Initiative Natural Resources Canada Canada

1 "Overview of CO₂ Mitigation Technology R&D in Korea"

Dr. Sung Chul Shin Senior Advisor

Korea Institute of Energy Research

Korea

2 "Improved Plant Performance and Reduced CO₂ Emissions through State-of-the-Art Condensor Cleaning"

Mr. Jerry Krysicki

International Account Executive

Conco Systems, Inc.

USA

3 "Development and Application of Flue Gas Carbon Dioxide Recovery Technology"

Mr. Nobuo Imai **Project Manager**

Engineering and Construction Center **Environmental Project Department** Mitsubishi Heavy Industry Ltd. (MHI)

Japan

15:50 Break

16:05 JOINT PANEL DISCUSSION

COAL'S FUTURE IN THE APEC REGION: CHALLENGES AND SOLUTIONS COAL FLOW AND CLEAN FOSSIL ENERGY

Chair: Ir. Dr. Datuk Mohd Annas Hj Mohd Nor Chairman Energy Commission Malaysia

Panelists 1 TBD Chinese Taipei

2 Mr. Hajime EndoGeneral ManagerEngineering Dept.Japan Coal Energy Center (JCOAL)Japan

3 Ms. Yu Zhufeng
Executive Director
Clean Coal Engineering and Research Center of Coal Industry
P.R. China

4 Mr. Suwandi Suyartono
Director of Mineral and Coal Technique
Directorate General of Geology and Mineral Resources
Ministry of Energy and Mineral Resources
Indonesia

5 Mr. Robin Bryant General Manager, Energy Minerals Branch, ACA Australian Coal Association Australia

18:05 Joint Seminar Closing Remarks Chair: Mr. Scott Smouse Chair, EGCFE

18:15 Break

19:05 Reception Hosted by Japan

Wednesday, 20 November 2002

8:00 - 17:00

Dujiangyan City and Neijiang Power Plant Tour

Dujiangyan City is located on the Chengdu Plain in Sichuan Province. In November 2000, the UNESCO's World Heritage Committee placed Dujiangyan Irrigation System on its World Heritage List. Construction of the irrigation system, which is located west of the Dujiangyan City, began in 256 BC during the Qin Dynasty under the leadership of Li Bing, Governor of Shu (Sichuan) Province, and still controls the waters of the Minjiang River and distributes it to the fertile farmland of the Chengdu plains. Nearby Mount Qincheng was the birthplace of Taoism, which is celebrated in a series of ancient temples. A tour of Dujiangyan City will be provided including several of the main scenic spots.

A tour of the Neijiang Gaoba Power Station operated by the Sichuan Electric Power Company in Neijiang will be also be provided after the Joint Seminar. This 100-MWe circulating fluidized bed (CFB) boiler was designed and erected by Foster Wheeler Corporation (USA) and is considered a key demonstration project by the Chinese State government. The 100-MWe unit was placed into commercial operation during the summer of 1996 and represents the state-of-the-art CFB in China.